

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Ronald VERMEER

Application No.: 10/572,719

Filed: March 21, 2005

For: CONCENTRATED SUSPENSIONS

Group Art Unit: 1616

Examiner: Abigail L. FISHER

Docket No.: 2903925-265000

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

After entry of the Notice of Appeal filed herewith, Applicants request review of the Final Rejection mailed March 25, 2010 in the above-identified application. Claims 11, 14-17, and 22 are pending in this application. Claims 11, 14-17, and 22 are rejected.

In the Final Rejection, claims 11, 14, 15, 17, and 22 are rejected under 35 U.S.C. §103(a) as allegedly obvious over the combination of U.S. Patent Application Publication No. 2001/0051175 to Strom et al. ("Strom"), Stock et al., *Development of a Predictive Uptake Model to Rationalise Selection of Polyoxyethylene Surfactant Adjuvants for Foliage-applied Agrochemicals*, 37 Pesticide Science 233-245 (1993) ("Stock"), and EP 1023832 to Aven ("Aven"); and claims 11 and 16 are rejected over the combination of Strom, Stock, U.S. Patent No. 6,559,136 to Mauler-Machnik et al. ("Mauler"), and WO 9727189 to Heinemann et al. ("Heinemann"). Applicants respectfully request pre-appeal review of each of these rejections based at least on the reasons set forth below.

I. Claims 11, 14, 15, 17 And 22 Would Not Have Been Rendered Obvious By The Combination Of Applied References

Claim 11: Strom does not teach or suggest feature (b) of claim 11, which recites: "between 5 and 20% by weight, based on the suspension concentrate of at least one penetration enhancer selected from the group consisting of alkanolethoxylates of formula (I)." Stock is asserted to cure this deficiency. However, a person having ordinary skill in the art

would not have had a reason to combine Stock with Strom in a manner to yield the combined features (a), (b), and (c) for at least the reasons outlined below.

1. Stock is not properly combinable with Strom because Stock is not related to a suspension concentrate. Stock does not describe *suspension concentrates* as are described in the instant invention and Strom. Instead, Stock describes aqueous acetone solutions, which are acknowledged by Stock to behave differently than the claimed "suspension concentrate." *See* Stock at p. 236. Indeed, Stock recognizes that modification of the ingredients in Stock will upset the predictive value discussed therein. For example, Stock states that "the uptake of a lipophilic compound can vary significantly if it is applied as an emulsion, a suspension or as technical material in aqueous acetone" emphasis added. *Id.* The instant specification echoes this concept when it discusses on page 1, lines 5-11 one of the goals and challenges of the instant invention, namely, to provide a suspension concentrate that has an equivalent or stronger activity than obtainable in a corresponding emulsion concentrate.

Stock provides no suggestion to add an alcohol ethoxylate to a suspension concentrate, let alone to one as instantly claimed. For example, Stock fails to even mention the use of a dispersant, let alone one of the specific, claimed dispersant mixtures of claim 11. Moreover, one of ordinary skill in the art would not have had any reason to believe that by adding in the alcohol ethoxylates described in Stock, foliar penetration of the Strom composition would be enhanced. These clear and direct teachings of Stock eliminate the requisite predictable expectation required to set forth a *prima facie* case of obviousness.

2. Stock is not properly combinable with Strom because Stock is not related to Fungicides. Stock fails to describe the active substances (fungicides) recited as feature (a). Instead it describes five organic compounds, at least three of which perform different functions (herbicidal or insecticidal) than the active compounds in claim 11 (fungicidal). As such, one of ordinary skill in the art would have had no reason to combine and no reasonable expectation of success in combining the ethoxylated alcohol of Stock with the active compounds of claim 11. Indeed, Strom itself identifies that the penetration enhancement is dependant—but unpredictably influenced—by the active substance (i.e. the penetrant) used therein. *See, e.g.*, Figs. 1-5 and pp. 242-243 ("Uptake-modifying influences... which cannot be predicted quantitatively at the present time include... the concentration, molecular dimensions, volatility and melting point of the penetrant."). Thus, Strom teaches away from using its penetration enhancer with active compounds that are not described by Strom and

teaches against any reasonable expectation of success when using the enhancer with the claimed fungicides.

3. The claimed range of (b) would not have been obvious. Even were one of skill in the art to modify Strom by adding in the alcohol ethoxylates of Stock, there is no suggestion to add "between 5 and 20% by weight" of the penetration enhancer as claimed. Stock explains that "Uptake-modifying influences... which cannot be predicted quantitatively at the present time include surfactant [penetration enhancer] concentration." Stock at pp. 242-243. Thus, Stock provides no instruction regarding the claimed quantity. Of course Strom is silent in this regard because it fails to teach at all the alcohol ethoxylate penetration enhancer.

4. Strom does not indicate there is a need for an enhancer. Strom does not suggest a problem with its composition that would necessitate the need for an enhancer. As such, there would have been no reason to add any enhancer, let alone the specifically claimed enhancer recited in feature (b).

Aven does not, nor is it asserted by the Examiner to, cure the above described deficiencies. Thus, the combination of Strom, Stock, and Aven would not have rendered obvious claim 11 or its dependent claims 14, 15, 17, and 22.

Claims 14, 15, and 17: In addition to the above reasons relating to claim 11, claims 14, 15 and 17, would not have been rendered obvious by the applied references because the Office Action and references fail to establish any rationale to select "tebuconazole," "tebuconazole and trifloxystrobin," or "trifloxystrobin" as respectively recited in claims 14, 15, and 17. Both Strom and Stock are silent with respect to these specific active compounds. The Office Action asserts that Aven cures this deficiency. Applicants disagree.

Aven simply teaches that tebuconazole and trifloxystrobin are known compounds. Applicants do not contest this fact. However, the fact that a compound is known is not sufficient to establish a reasonable expectation of success in adding such a compound into the modified composition of Strom and Stock. In other words, the compatibility of tebuconazole and trifloxystrobin, separately and together, with claimed features (b) and (c) would not have been obvious just because the compounds or combination of compounds are known. Indeed, Stock establishes, as explained above, that penetration enhancement is unpredictably influenced by the active compound. If a single active compound is unpredictable in its

response to a penetration enhancer, then the combination of both tebucanazole and trifloxystrobin, as recited in claim 15, is even more unpredictable and, as such, non-obvious. Aven and the other references fail to establish any reason to select these particular active compounds.

Claim 22: In addition to the above reasons relating to claim 11, claim 22, would not have been rendered obvious by the applied references for the following additional reasons. Even were one of skill in the art to incorporate an alcohol ethoxylate into the composition of Strom, there would be no reason to select from Stock the very specific alcohol ethoxylate of formula (I) where "m represents 11 and n represents 10" as recited in claim 22. Indeed, as discussed on page 6 of Applicants' Amendment in Response to the March 25 Final Office Action, the only correlations determined by Stock with respect to ethylene oxide content occur at high and low contents, as opposed to the content of claim 22. The content recited in claim 22 is neither specifically taught, nor suggested in Stock. One of ordinary skill in the art would have had no reason to select the specific integers recited in claim 22 because there is no suggestion in Stock or the other references that such a specific alcohol ethoxylate will work with features (a) and (c).

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of the rejection.

II. Claims 11 and 16 Would Not Have Been Rendered Obvious By The Combination Of Applied References

The combination of Strom, Stock, Mauler, and Heinemann would not have rendered obvious claims 11 and 16. The deficiencies of Strom and Stock are discussed above. Mauler and Heinemann are only asserted for their alleged disclosure of prothioconazole and fluoxastrobin. Thus, the deficiencies described above remain with respect to this second combination of references and claims 11 and 16.

In addition to these reasons, the applied combination of references would not have rendered obvious claims 11 and 16 because the Office Action and the references fail to establish any reasonable rationale to select the specific compounds recited in claim 11, and more specifically the particular combination of "prothioconazole and fluoxastrobin" recited in claim 16.

Admittedly, prothioconazole and fluoxastrobin are known compounds and are respectively described in Mauler and Heinemann. However, their compatibility with features (b) and (c) would not have been obvious just because the compounds or combination of compounds are known. Stock establishes that penetration enhancement is unpredictably influenced by the active compound itself. *See* Stock at pp.242-243. In view of such a teaching, one of skill in the art would not have had a reason to select the specifically claimed active compounds of claim 16 from the laundry list of actives disclosed in Mauler and Heinemann and also have had any reason to expect that the combination of prothioconazole and fluoxastrobin would work in the already modified, and flawed, composition of Strom and Stock.

Mauler is directed to active compound combinations comprising pyrimidines and other known fungicidally active compounds in specific weight ratios that result in synergistic effects. Mauler sets forth a very broad formula for pyrimidines (some of which are described in Heinemann) encompassing dozens of possible pyrimidines along with at least 82 "other known" fungicidally active compounds. As such, Mauler literally sets forth thousands of possible pyrimidine/other fungicide combinations. One of skill in the art would have had no reason to make the particular selection as asserted by the Examiner.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

III. Conclusion

For all the reasons discussed above, Applicants respectfully submit that the rejections are in error and that all the pending claims are in condition for allowance. Applicants respectfully request the panel of Examiners to allow this application.

Respectfully submitted,

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